To: Way, Steven[way.steven@epa.gov]
From: Matt Francis
Sent: Fri 9/11/2015 10:25:15 PM
Subject: RE: Pipeline questions - 8 inch segment Laydown to Gladstone

We're getting the 8" plus air valves and clean out ports. You should have an email I fwd'd yesterday from Eric Anderson that details the additions and prices. If you dont see it let me know.

Sent via the Samsung Galaxy Note® 3, an AT&T 4G LTE smartphone

-------- Original message --------
From: "Way, Steven" <way.steven@epa.gov>
Date: 09/11/2015 4:22 PM (GMT-07:00)
To: Matt Francis <m.francis@erllc.com>
Cc: "Myers, Craig" <Myers.Craig@epa.gov>, "Petri, Elliott" <Elliott.Petri@WestonSolutions.com>
Subject: RE: Pipeline questions - 8 inch segment Laydown to Gladstone

Matt,

I'm not sure that we concluded this discussion. Between the base of the slope (R n B laydown) and Gladstone, plan on the 8 inch pipe if it's available in the required timeframe. Based on the difference

CBI/Ex. 4

Steve

Steven Way
Federal On-Scene Coordinator
Emergency Response Unit
US EPA - Region 8
1595 Wynkoop Street
Denver, CO 80202

Office: 303-312-6723

-----Original Message-----
From: Matt Francis [mailto:m.francis@erllc.com]
Sent: Wednesday, September 09, 2015 9:08 PM
To: Way, Steven
Subject: RE: Pipeline questions

See email fwd:Gold King. In it APTEC provides Calc saying flow meets requirements.

Sent via the Samsung Galaxy Note(r) 3, an AT&T 4G LTE smartphone

-------- Original message --------
From: "Way, Steven" <way.steven@epa.gov>
Date: 09/09/2015 8:57 PM (GMT-07:00)
To: Matt Francis <m.francis@erllc.com>

Subject: Re: Pipeline questions

I am not seeing the APTec "disagreement "

What are they proposing?

Sent from my iPhone

> On Sep 9, 2015, at 7:16 PM, Matt Francis <m.francis@erllc.com> wrote:
>

CBI/Ex. 4

>
>
> Sent via the Samsung Galaxy Note(r) 3, an AT&T 4G LTE smartphone
>
>
> -------- Original message --------
> From: "Petri, Elliott" <Elliott.Petri@WestonSolutions.com>
> Date: 09/09/2015 1:59 PM (GMT-07:00)
> To: "Way, Steven" <way.steven@epa.gov>, Matt Francis <m.francis@erllc.com>, "Myers, Craig" <Myers.Craig@epa.gov>
> Subject: RE: Pipeline questions
>
> Steve,
> I spoke with Dave and he said that the response below is a conservative estimate without doing a full design with proper profiles, from the email traffic it looks like APTec will be calculating flows as well.
>
> Dave offered to get on a conference call with us to clarify any questions you have for him. Below is the response he gave to your questions Steve:
>
> Elliot,
>

CBI/Ex. 4

> Thanks,
> Dave
>
> Let me know if you would like to arrange a call (if so who needs to be invited) or have any other questions.
>
> Thanks,
> Elliott
>
>
> Elliott Petri, PE
> Weston Solutions, Inc.
> 1435 Garrison St, Ste 100
> Lakewood, CO 80215

> Ph: 303-729-6156
> Cell: 719-216-2754
> Fax: 303-729-6101
>
> From: Way, Steven [mailto:way.steven@epa.gov]
> Sent: Wednesday, September 09, 2015 10:49 AM
> To: Matt Francis <m.francis@erllc.com>; Petri, Elliott <Elliott.Petri@WestonSolutions.com>; Myers, Craig <Myers.Craig@epa.gov>
> Subject: RE: Pipeline questions
>
> Elliott,
>
> Can you please provide information on Dave below (assume that he's with Weston) and is piping his specialty.
>

Deliberative Process/Ex. 5

>
> Thank you,
> Steve
>
> Steven Way
> Federal On-Scene Coordinator
> Emergency Response Unit
> US EPA - Region 8
> 1595 Wynkoop Street
> Denver, CO 80202
>
> Office: 303-312-6723
>
> From: Matt Francis [mailto:m.francis@erllc.com]
> Sent: Tuesday, September 08, 2015 3:29 PM
> To: Petri, Elliott; Myers, Craig; Way, Steven
> Subject: RE: Pipeline questions
>
> Thanks Elliott, the pressures identified are what I needed to justify the DR7 upgrade. I've got enough now to make the case, just need confirmation of what configuration is wanted to get APTec started.
>

CBI/Ex. 4

work, and I believe it can be justified from a procurement point of view. Let me know if you concur and what configuration you would like.
> Thanks
> Matt
>
> From: Petri, Elliott [mailto:Elliott.Petri@WestonSolutions.com]
> Sent: Tuesday, September 08, 2015 10:34 AM
> To: Matt Francis <m.francis@erllc.com<mailto:m.francis@erllc.com>>; Craig Myers <Myers.Craig@epa.gov<mailto:Myers.Craig@epa.gov>>; Steven Way

<Way.Steven@epa.gov<mailto:Way.Steven@epa.gov>>
> Subject: Fwd: Pipeline questions
>
> Hi Matt, Craig and Steve,
> I asked my reviewer to estimate max flow in a 6" pipe and the DR7 pipe, please see the exchange below. It requires more detail than I have him for exact calcs, but it looks like APT met the 1000gpm design criteria.
>
> Thanks,
> Elliott
>
> Elliott Petri, PE
> Weston Solutions, Inc.
> 1435 Garrison St, Ste 100
> Lakewood, CO 80215
> Ph: 303-729-6156
> Cell: 719-216-2754
> Fax: 303-729-6101
>
> Sent from a tiny phone screen, most likely with sun glare. Please excuse typos!
> ----------
>
> Elliot,
>
>
>
> From what you have described the total drop on the pipe is around 550 feet. This means if the pipe was full because the valves were shut on the bottom the static head at the bottom of the pipe would be about 240 psi. HDPE DR 7 pipe is rated at 267 psi so it can hold the static pressure. This does not account for water hammer which may increase the pressure substantially. HDPE DR 11 is rated at 160 psi. As for the capacity, the ID of 6-inch HDPE DR 7 is 4.619" so if water was flowing at 120 ft/sec, the pipe would carry about 500 gpm and at 20 ft/sec 1000 gpm. It's really hard to calculate a max capacity for the pipe based on the information we have, but 20 ft/sec would be a good guess as the max velocity in the pipe. Call if you have questions.
>
>
>
> Thanks,
>
> Dave
>
>
>
> From: Elliott
>
>
>
> The slope at the worst is 35% over 850lf,....um the slope at the top is extremely rough (run over drop) ~500/50, the bottom more like 8% for 2500 ft. There are some variable changes but from a quick snap shot of my mind this is a really rough go.
>
>
>
> Thanks,
>
> Elliott

>
>
>
> Elliott Petri, PE
>
> Weston Solutions, Inc.
>
> 1435 Garrison St, Ste 100
>
> Lakewood, CO 80215
>
> Ph: 303-729-6156
>
> Cell: 719-216-2754
>
> Fax: 303-729-6101
>
>
>
> Sent from a tiny phone screen, most likely with sun glare. Please excuse typos!
>
>
>
> "Dave" wrote:
>
> What can you give me for details on the pipe alignment? Slope?
>
>
>
>
>
>
>
> From: Petri, Elliott
> Sent: Tuesday, September 08, 2015 7:21 AM
> To: Dave
> Subject: Pipeline questions
>
>
>
> Hi Dave,
>

CBI/Ex. 4

>
>
> Thanks,
>
> Elliott
>
>
>
> Elliott Petri, PE
>
> Weston Solutions, Inc.
>

> 1435 Garrison St, Ste 100
>
> Lakewood, CO 80215
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>
>

>
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